WHAT IS A DESIGN DEVIATION?

Highway Design standards are established by the Department through coordination with the Federal Highway Administration (FHWA) and are documented in the WSDOT Design Manual. The standards are developed to provide a safe operational roadway and are based on factors such as traffic volume, urban or rural surroundings, design speed, and access control. A deviation would be requested when a proposed design element does not meet or exceed the applicable design level for the project.

Deviations are often used to allow a design element when implementation of the standard would not be cost-effective. Analysis and justification must be provided to demonstrate that the deviation will not adversely impact the safety or operation of the roadway. Deviations to standards on the Interstate must be approved by FHWA.

WHAT WILL THE FUNDING PAY FOR?

- Spent to date for EIS
  $5 million
- Complete EIS, design file, and final design
  $18.5 million
- Potential Right of Way needed for detention and water quality facilities
  $5.6 million
- Construction
  $98.9 million

Major elements of construction include: widening of the outer roadways through Mercer Island and Corwin Curves, construction of new ramps on Mercer Island at 77th and 80th Ave SE, reconstruction of the barrier between the center and westbound roadways on the Homer M. Hadley bridge, modification of the Bellevue Way SE ramp by widening and adding a barrier, replacement of bridge expansion joints, and construction of detention and drainage facilities.

Washington State Department of Transportation

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Transportation Commission Briefing

I-90 Two-Way Transit and HOV Operations Project

OVERVIEW

This project is included in Sound Transit's *Sound Move*, the 1996 voter approved plan to finance construction and operation of a regional transit system. The project would make transit and HOV improvements on the I-90 corridor between Seattle and Bellevue crossing Lake Washington via Mercer Island. The primary goal is to improve speed, reliability and access for regional transit. Although the original Sound Move project was to improve transit, the project purpose has been expanded in the course of the environmental process to include improvement for HOV travel in the corridor.

The project is guided by a Steering Committee from Sound Transit and the signatories of a 1976 I-90 Memorandum Agreement: WSDOT, King County, Seattle, Bellevue, and Mercer Island. The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) are also represented on the committee.

A draft Environmental Impact Statement (EIS) was published in the spring of 2003 and evaluated five alternatives for this corridor, including a no-build alternative. In July, the Steering Committee identified the alternative that adds HOV lanes on the outer roadway, also known as alternative R-8A, as the preferred alternative for this project. The Sound Transit Board identified this alternative as the agency preferred alternative in November 2003.

NEED FOR IMPROVEMENTS TO I-90

Increased traffic on I-90 between Seattle and Bellevue over the past decade requires transportation improvements to the corridor.

Travel Patterns – At one time, the majority of people and vehicles traveled westbound to Seattle in the morning and eastbound from Seattle in the evening. Now, the numbers of people and vehicles traveling across Lake Washington are nearly equal in each direction during peak periods.

As traffic congestion on I-90 worsens, all travel on the Lake Washington crossing will become increasingly slow and less reliable.

Transit Reliability – The reliability of transit service across the lake has diminished significantly due to the lack of priority for transit and carpools traveling in the "reverse-peak" direction. Currently buses operate from 1 to 25 minutes late in the peak travel period. As a result, people reach their destinations late, transit transfer connections are not made, and transit operations costs increase. For I-90 "reverse-peak" is eastbound in the AM peak period and westbound in the PM peak period.

PREFERRED ALTERNATIVE – ADD HOV LANES TO OUTER ROADWAY

The preferred alternative will provide many benefits to the corridor. The alternative provides a dedicated lane for transit and HOV in both directions resulting in decreased travel times, improved transit reliability, and less congestion. The center roadway will continue with a reversible operation in the peak direction of travel. It also best accommodates future High Capacity Transit (HCT) in the center roadway by providing HOV lanes on the outer roadway to address transit and carpool needs now and in the future.

The preferred alternative will add HOV lanes to the outer roadways on the bridge by narrowing existing lanes from 12 feet to 11 feet. Adding lanes on the non-bridge portion of the roadway will involve some widening within WSDOT right of way to maintain 12 foot lanes. Narrowing of lanes is a design deviation from standards that requires approval by the FHWA.

WHAT IS THE MA AND WHY IS IT BEING AMENDED?

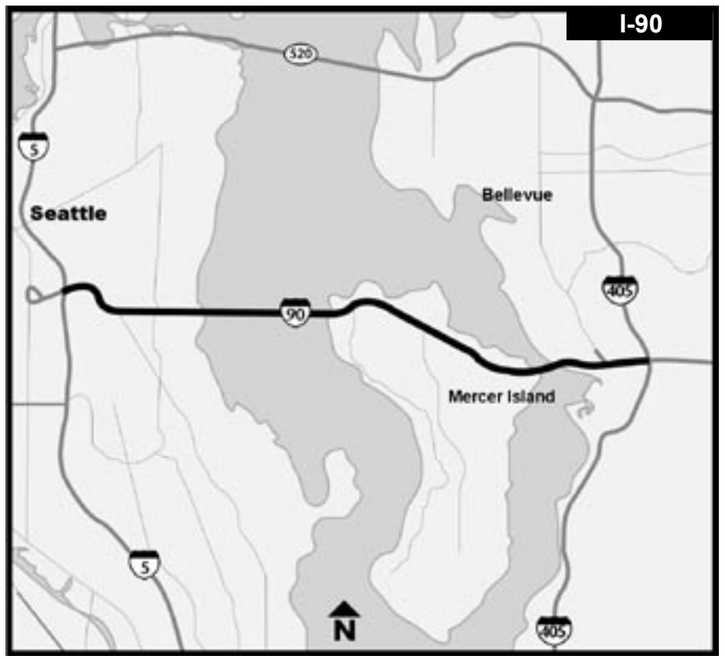
In 1976, a memorandum agreement (MA) describing the manner in which the I-90 corridor between I-5 and I-405 would be designed, constructed, and operated was executed by the Washington State Highway Commission (now WSDOT), King County, Municipality of Metropolitan Seattle (now King County Metro), and the cities of Bellevue, Mercer Island and Seattle. The MA resolved significant issues about the I-90 project including the lids on Mercer Island and Seattle, transit facilities and the bike/pedestrian pathway; a two-lane transit roadway that would accommodate transit and carpools and be operated in either a reversible or two-way directional mode; access to those lanes to Mercer Island traffic; and facility construction so that conversion of the transit roadway to fixed guideway would be possible. The MA further states that the State Transportation Commission would make no major change to the operation or capacity of the facility without concurrence of the parties.

The MA is being amended to formalize the parties' agreement that the addition of HOV lanes on the outer roadways should occur as soon as possible as a first step to implementing HCT in the transit roadway. The parties are also committing to the earliest possible conversion to HCT based on the outcome of studies and funding approvals. Sound Transit will be added as a party. The fully signed amendment is necessary before the Commission would take action to make such a major change to I-90.

WHAT ISSUES NEED TO BE RESOLVED BEFORE STARTING FINAL DESIGN AND CONSTRUCTION?

A number of items still require resolution to allow this project to move forward from the preliminary engineering/environmental phase into final design and construction.

Federal Approvals: FHWA approval is required at several points throughout the design process before construction may be authorized. FHWA approval of the final EIS, a Record of Decision, and design deviations are necessary prior to initiating final design.



Flammable Cargo Routing: It had been originally assumed that flammable cargos would need to be rerouted from I-90 as a part of the preferred alternative. However, an analysis of flammable cargo transportation indicates that the risk of a crash involving flammable liquid cargo would remain extremely low for the preferred alternative. WSDOT's intent is to retain flammable cargo loads on I-90 and will study the means of managing risks associated with allowing these loads to use the tunnels and lids.

The continued transport of flammable cargoes in the I-90 tunnels and lids requires consideration of both the likely frequency and consequences of fires. The decision will be made in consultation with FHWA and others, including local fire departments. If this effort results in a decision to prohibit these loads, WSDOT will focus study on means of managing risks associated with moving these loads to alternative routes.

Funding: A Cost Estimate Validation Process (CEVP) was performed in January 2003 to evaluate an earlier project estimate. The results of the CEVP indicate there is a 90% likelihood that the cost to complete the preferred alternative will not exceed $123 million. Approximately $14 million is available from Sound Transit ($5 million of Sound Transit funding has already been spent) in addition to $15 million authorized in the 2003 Legislative Funding Package. It is anticipated that available funding is adequate to complete final design, however, additional funds are needed for construction.

There are prospects for Regional Transportation Improvement District investment in this project. In addition, $30 million of federal funding has been requested as a part of the re-authorization of TEA-21 funds.

Mercer Island Mobility: Currently, the center roadway is available to transit, HOV's, and all Mercer Island traffic in the direction of peak flow. Implementing the preferred alternative would not alter Mercer Island traffic access. However, selection of the preferred alternative was accompanied by the following recommendations:

1. The preferred alternative is the essential first step towards implementing HCT on the center roadway.
2. Implement the preferred alternative as quickly as possible.
3. Accelerate HCT planning.
4. Commit to earliest conversion of the center roadway to HCT operation.

The conversion of the center roadway to HCT will require relocation of all traffic from the center roadway, including Mercer Island traffic. Before conversion of the center roadway to HCT, additional transit facilities and services available for Mercer Island travelers would be identified and addressed.

UPCOMING ACTIVITIES

- Execution of MA Amendment by parties – Spring 2004
- Final EIS issued – Spring 2004
- Sound Transit Board approval of the project – Summer 2004
- Record of Decision (ROD) approved by FHWA – Summer 2004
- Commission approval of the project – September 2004
- Final Design – Summer 2004 - Spring 2006

I-90 TWO WAY TRANSIT & HOV OPERATIONS PROJECT